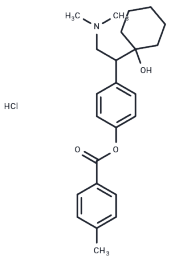
Data Sheet (Cat.No.T5380)

TargetMol

Ansofaxine hydrochloride

Chemical Properties



CAS No. : 916918-84-8

Formula: C24H32ClNO3

Molecular Weight: 417.97

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Ansofaxine hydrochloride (LY03005) is a serotonin-norepinephrine-dopamine reuptake inhibitor (IC50s: 723, 763 and 491 nM, respectively).
Targets(IC50)	5-HT Receptor,Norepinephrine,Dopamine Receptor
In vivo	Acute administration was performed by providing rodents with oral solutions (0.06 mmol/kg p.o.), oral suspensions (0.06 mmol/kg p.o.) and intravenous solutions (0.04 mmol/kg i.v.) of Ansofaxine and desvenlafaxine. Oral suspensions (0.06 mmol/kg/day) of the two drugs were also administered for a 14-day chronic period. Ansofaxine rapidly penetrated the rat striatum, converted into desvenlafaxine and exhibited larger total exposure compared with the administration of desvenlafaxine. Acute and chronic administration of oral suspension of Ansofaxine increased the 5-HT, DA and NE levels more than the relative administration of desvenlafaxine [1]. The maximum tolerated dose (MTD) was 500mg/kg and the lethal dose was 1000mg/kg in SD rats after a single administration of Ansofaxine. In 13-week repeated-dose oral toxicity, the no-observed-adverse-effect level (NOAEL) of Ansofaxine was greater than 300mg/kg for rats [2].
Animal Research	The dosages of LPM570065 and desvenlafaxine used with different administration routes referred to previous studies and was determined by preliminary experiments. Oral solutions of LPM570065 and desvenlafaxine for intragastric administration (0.06 mmol/kg p.o.) were prepared by dissolving the compounds in 10% glucose. Oral suspensions of LPM570065 and desvenlafaxine for intragastric administration (0.06 mmol/kg p.o.) were prepared by suspending the compounds in 0.5% carboxymethylcellulose sodium. Intravenous solutions of LPM570065 and desvenlafaxine for intravenous administration (0.04 mmol/kg i.v.) were prepared by dissolving the compounds in 10% glucose. WAY-100635 was dissolved in 0.9% saline and was administered subcutaneously (0.3 mg/kg s.c.). Raclopride was dissolved in 0.9% saline and was administered subcutaneously (0.5 mg/kg s.c.). Different vehicles were used for administration using different administration routes [1].

Solubility Information

Solubility	DMSO: 16.67 mg/mL (39.88 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.79 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3925 mL	11.9626 mL	23.9252 mL
5 mM	0.4785 mL	2.3925 mL	4.785 mL
10 mM	0.2393 mL	1.1963 mL	2.3925 mL
50 mM	0.0479 mL	0.2393 mL	0.4785 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Zhang R, et al. The effects of LPM570065, a novel triple reuptake inhibitor, on extracellular serotonin, dopamineand norepinephrine levels in rats. PLoS One. 2014 Mar 10;9(3):e91775.
Li C, et al. Acute, subchronic oral toxicity, and genotoxicity evaluations of LPM570065, a new potent triple reuptake inhibitor. Regul Toxicol Pharmacol. 2018 Oct;98:129-139.